

NATURAL RESOURCES & ENVIRONMENTAL SCIENCES

Welcome!



IN THE NEWS

Find out what is happening around the department

EVENTS

Forestry Fair and GIS Internship

STUDENT INTERNSHIPS

Summer Internships

RESEARCH

DNA Workshop and Forestry Apprenticeship



ALABAMA A&M UNIVERSITY

NEWS

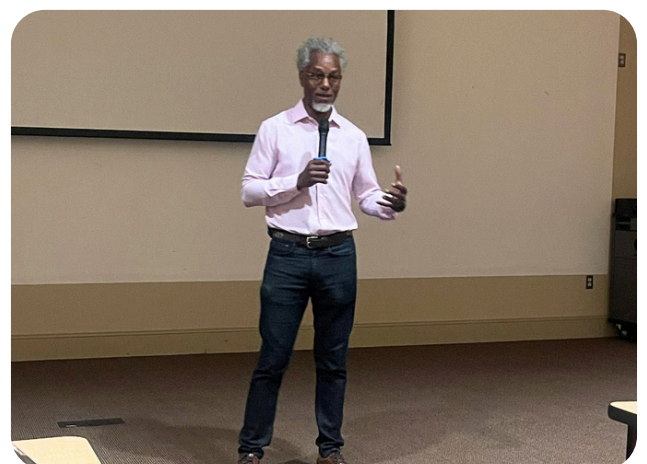
***IN MY BACKYARD* FILM PREVIEW BRINGS COMMUNITY TOGETHER AROUND CONSERVATION**

By CJ Holden, AAMU Alumn and Co-Founder of The Green Gift

Thank you to everyone who joined The Green Gift for our *In My Backyard* film preview. The event was an inspiring evening that brought together students, faculty, and community members for meaningful conversations about conservation, environmental stewardship, and the positive impact we can make in our own communities.

We extend a special thank you to James E. Page Jr. for sharing insights into The Nature Conservancy's conservation efforts and to Tonyisha Harris for bringing the film to life through her thoughtful discussion and engaging audience Q&A. Throughout the evening, attendees were captivated by the stories shared in the film, with many finding personal connections to the experiences, landscapes, and communities represented. Those connections sparked authentic conversations about the importance of protecting our natural resources and preserving the places that shape our lives.

We are grateful to everyone who attended and helped make this event a success. Through partnerships and community engagement, we look forward to creating more opportunities that inspire environmental awareness, promote conservation, and connect people through science and service.



Photos from CJ Holden

GIANNA PORTER RECEIVES \$30,000 NSF EPSCOR GRADUATE RESEARCH SCHOLARS PROGRAM SCHOLARSHIP

By Dr. Elica Moss and Gianna Porter



Gianna Porter, a master's student in Plant and Soil Sciences at Alabama A&M University, has been selected as a recipient of the NSF EPSCoR Graduate Research Scholars Program (GRSP) scholarship. The award, valued at \$30,000 per year, will support her graduate studies and research in soil microbiology and sustainable soil remediation.

Porter's research, titled "The Metagenomic Analysis of Soil Using Cold Plasma," examines the effects of cold atmospheric plasma on soil microbial communities. This emerging technology has potential applications in soil remediation, but its effects on soil bacteria and the broader soil microbiome are not yet fully understood. Her work aims to better understand these interactions and their implications for sustainable soil remediation and soil health.

Healthy soil depends on diverse and active microbial communities that play important roles in nutrient cycling and other essential soil processes. By investigating how cold plasma affects these communities, Porter's research could provide valuable insight into how this technology may be used as an effective and environmentally responsible approach to soil remediation.

Porter earned her B.S. in Biology with a concentration in Microbiology from the University of Alabama in Huntsville, where she gained experience in microbial genetics. Her interest in soil microbiology and environmental sustainability was further strengthened through her work as an Environmental Educator at the Huntsville Botanical Garden.

She is conducting her graduate research under the advisement of Dr. Elica Moss. The NRES Department congratulates Gianna on this outstanding achievement and looks forward to the contributions her research will make to soil health, sustainable remediation, and environmental sustainability.

Photo from Gianna Porter

NRES WELCOMES INTERNATIONAL DELEGATION TO EXPLORE AGRICULTURAL INNOVATION AND SOIL SCIENCE

By Dr. Dedrick Davis



The Department of Natural Resources and Environmental Sciences (NRES) at Alabama A&M University recently welcomed an international delegation of agricultural leaders from 13 African nations as part of the U.S. Department of State's International Visitor Leadership Program (IVLP).

The delegation's visit to Alabama A&M was part of an IVLP program focused on Agricultural Innovation and Food Security, bringing together government officials, researchers, entrepreneurs, and industry leaders from across Africa to explore innovative approaches to strengthening agricultural systems, improving food security, and developing international partnerships.

As part of their visit to Alabama A&M, the delegation began on campus with NRES before continuing to the departments of Food and Animal Sciences (FAS) and Family and Consumer Sciences (FCS). During their time with NRES, visitors engaged with faculty and discussed the department's work in soil science, soil health, sustainable agriculture, and environmental sciences.

The conversations allowed the visiting agricultural leaders an opportunity to learn more about Alabama A&M's expertise in soil and natural resource management while also sharing perspectives on agricultural challenges and opportunities in their respective countries. Discussions also explored potential areas for future outreach and collaboration, particularly related to soil science and sustainable agricultural practices.

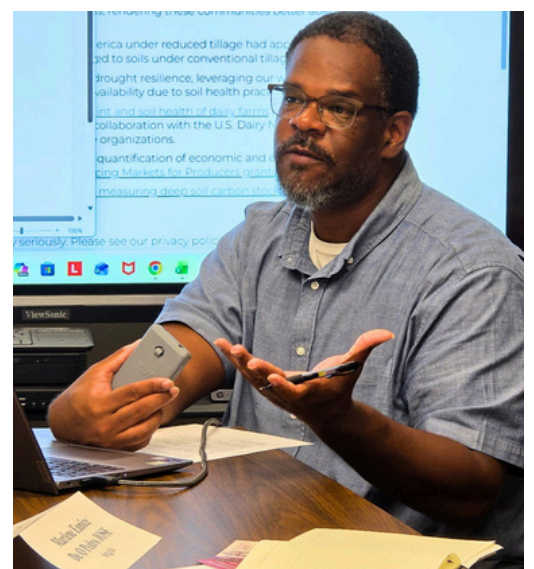


NRES is well positioned to contribute to these international conversations through its academic and research programs in natural resources and environmental sciences, including graduate programs in Plant and Soil Science. The department's faculty bring expertise across areas such as soil science, soil microbiology, soil physics, environmental science, forestry, ecology, and related disciplines.

Global Ties Alabama coordinated the visit, and World Learning administered it on behalf of the U.S. Department of State. The International Visitor Leadership Program is the U.S. Department of State's premier professional exchange program, connecting current and emerging international leaders with American counterparts to encourage professional collaboration and build long-term partnerships.

For NRES, the visit highlighted the department's role in connecting soil and environmental science with global agricultural challenges. Discussions with the delegation also opened the door to continued conversations about international research partnerships and opportunities to collaborate on issues affecting soil health, agricultural productivity, and food security.

The visit reflects Alabama A&M University's growing international engagement and NRES's commitment to applying natural resources and environmental science to challenges that extend well beyond the university and the United States.



AAMU STUDENTS EARN NATIONAL RECOGNITION THROUGH U.S. FOREST SERVICE PARTNERSHIP AT GREAT AMERICAN STATE FAIR

By Dr. Kozma Naka



For one week this summer, Alabama A&M University students found themselves at the center of a national stage, connecting with thousands of members of the public, showcasing their forestry skills, and representing both AAMU and the U.S. Forest Service.

From June 29 through July 5, AAMU students Alayna Battle, Christopher Burns, David Green, and Elijah McCray joined AAMU Forester Jeremy Whigham and Student and

Emerging Professionals Program Manager Stephanie Love for an intensive week of public outreach at the Great American State Fair, followed by a professional immersion experience in Washington, D.C.

Each day at the fair brought new opportunities to engage with visitors and share the work of the Forest Service. The AAMU students played an important role in bringing the agency's exhibit to life, helping with daily equipment setup, demonstrations, and conversations with fairgoers. Their professionalism and willingness to step in wherever they were needed did not go unnoticed. During the week, the students also assisted fairgoers experiencing severe heat exhaustion, demonstrating the adaptability, awareness, and commitment that leadership later praised as "the very best of who we are as the U.S. Forest Service."

The students quickly became a favorite part of the fair experience. Crowds gathered each day to watch the AAMU students operate the crosscut saw and cheer as Whigham demonstrated his chainsaw skills. Even under the intense summer heat, the team continued to bring energy and enthusiasm to the exhibit, creating memorable experiences for visitors while sharing their knowledge of forestry and public service.



When the week at the fair ended, the experience continued in Washington, D.C., where the AAMU team took part in a Forest Service-hosted educational and cultural experience. The group received a private tour of the agency's historic headquarters in the Yates Building and climbed to the top of the building's iconic clock tower, taking in views of the capital region. They also received an exclusive first look at the Forest Service's new animatronic Smokey Bear.

The trip also offered opportunities to explore the nation's history, culture, and scientific achievements. The group visited several Smithsonian museums, including the National Museum of African American History and Culture, the National Air and Space Museum, the National Museum of American History, and the National Museum of Natural History.



At the conclusion of the experience, U.S. Forest Service leadership, including the Chief, formally recognized the AAMU team for their outstanding performance and service. The recognition reflects the students' dedication and the impact they made throughout the week.



The experience also highlights the strong and growing partnership between Alabama A&M University and the U.S. Forest Service. Through opportunities like these, students gain valuable professional experience while contributing to the shared goals of workforce development, forestry education, and meaningful public engagement.



Photos by David Green and from Dr. Kozma Naka

EVENTS

FORESTRY FAIR BRINGS FORESTRY AND NATURAL RESOURCES TO LIFE FOR AREA YOUTH

By Dr. William Stone and Mekhi Miller



The Alabama A&M University campus came alive with curiosity and discovery on June 17 as more than 300 students from local summer camps gathered on The Quad for the 11th Annual Forestry Fair. Hosted through a partnership among Alabama A&M University, the USDA Forest Service, and the Society of American Foresters, the annual event gave young people a chance to explore forestry, conservation, and careers in natural resources through hands-on learning.

The Forestry Fair transformed The Quad into an outdoor classroom, where participants rotated through interactive exhibits and demonstrations led by forestry professionals, researchers, wildlife biologists, and Alabama A&M faculty and students. Activities explored topics including wildlife ecology, hydrology, forest management, wildfire prevention, and the history of conservation, giving students a closer look at how forests and natural resources shape everyday life.



One featured exhibit, the Conservation Education station, demonstrated the connection between forests and many products people encounter every day. Alayna Battle, a Forester Trainee with the USDA Forest Service, used familiar items such as honey and chocolate, as well as less obvious products including cardboard shipping boxes and the wax used to make scented candles, to help visitors recognize the resources forests provide.



“My goal was to show visitors that forests are connected to our everyday lives in more ways than most people realize,” Battle said. “From rubber and chocolate to cardboard boxes and toothpaste, these products are a testimony of the many benefits forests provide.”



The event resulted from months of planning and collaboration. Event Director Stephanie Love and Event Organizer Mekhi Miller coordinated logistics, exhibitors, guides, and volunteers to help ensure a successful event.

Miller, a National Partnerships Office Student Trainee with the USDA Forest Service, emphasized the teamwork behind the fair.

“The success of the Forestry Fair was made possible through the dedication and collaboration of our partners, professors, student interns, student apprentices, volunteers, and, most importantly, the community members who attended and participated,” Miller said.

For the Department of Natural Resources and Environmental Sciences, the Forestry Fair reflects its commitment to education and community outreach. The event allows NRES faculty and students to share their expertise beyond the classroom while introducing younger generations to the science, stewardship, and career opportunities connected to natural resources.

The fair also highlighted the interdisciplinary nature of natural resources and environmental sciences. Through activities focused on wildlife, water resources, forest management, forest health, and wildfire prevention, participants saw how different areas of science work together to address environmental challenges and promote sustainable resource management.

By connecting students with natural resource professionals and hands-on experiences, the Forestry Fair offered a glimpse into the many career paths available in the field. For some participants, the event may be their first introduction to forestry, wildlife, environmental science, or conservation—and the first step toward becoming tomorrow’s environmental professionals and stewards.



AAMU INTRODUCES HIGH SCHOOL STUDENTS TO GEOSPATIAL SCIENCE THROUGH SUMMER RESEARCH APPRENTICESHIP PROGRAM

By Dr. Ranjani Kulawardhana

Alabama A&M University welcomed high school students from across North Alabama this summer for the Summer Research Apprenticeship Program in Geospatial Data Science. This week-long, hands-on experience introduced students to STEM research, geospatial technology, and future career opportunities. The program allowed students to explore how technology, data, and science can be combined to understand the world around us better and address real-world challenges.



Throughout the program, students learned the fundamentals of Geographic Information Systems (GIS) and explored the many ways geospatial data can be collected, analyzed, and visualized. Through classroom instruction and hands-on activities, students developed maps, worked with GIS datasets, collected field data using GPS technology, and explored drone-based data collection techniques.



These activities allowed students to move beyond traditional classroom learning and experience the types of tools and technologies used by researchers and professionals in the field. By working directly with geospatial data, students gained a better understanding of how location and spatial information can identify patterns, analyze environmental conditions, and support decision-making.

Hosted by Alabama A&M University faculty and graduate students, the Summer Research Apprenticeship Program reflects the university's commitment to STEM outreach, mentorship, and hands-on learning opportunities for young students. Programs like this help students explore potential academic and career pathways while connecting them with faculty and researchers who can offer insight into opportunities in higher education and STEM fields.

For students interested in environmental science and natural resources, GIS is an increasingly important tool for studying landscapes, monitoring environmental change, managing natural resources, and addressing complex challenges such as climate change. Geospatial technologies can examine everything from changes in land use and vegetation to environmental conditions and the impacts of climate-related events. By connecting technology with environmental applications, the program helped students see how skills in GIS, data science, and geospatial technology can solve real-world problems.

The program also introduced students to the growing role of geospatial data science in research and the workforce. As technology continues to advance, professionals in environmental science, natural resources, urban planning, agriculture, and other fields increasingly rely on geospatial tools to collect and interpret information. Early exposure to these technologies can help students recognize the wide range of opportunities available to them in STEM education and careers.

This workshop was supported by the U.S. Department of Energy (DOE) RENEW Grant, Applied Geospatial Data Science Initiative for Urban Climate Change Studies (AGDI-UCCS), awarded to Principal Investigator Dr. Ranjani Kulawardhana. With this year's cohort, the program has successfully trained three cohorts since its launch in summer 2024. The program plans to introduce an advanced training opportunity next year for students who have completed Cohorts 1–3, allowing participants to build on the knowledge and skills they developed in the initial program.

Dr. Kulawardhana acknowledges the support of the Department of Natural Resources and Environmental Sciences, the College of Agricultural, Life and Natural Sciences, and co-principal investigators from collaborating national laboratories, Oak Ridge National Laboratory (ORNL) and Pacific Northwest National Laboratory (PNNL). Through continued collaboration and support, Alabama A&M University is helping expand access to hands-on STEM experiences and inspire the next generation of scientists, researchers, and innovators.



Photos by Rachel Stone and Rong Xiao

SUMMER INTERNSHIPS

STUDENT HIGHLIGHT: STEPHANE JEAN NOEL

By Stephane Jean Noel



During the summer of 2026, graduate student Stephane Jean Noel completed an internship with the Soil Health Institute (SHI) in Southeast Missouri. The project was conducted as part of the U.S. Regenerative Cotton Fund (USRCF) and focused on evaluating soil health across the Southern Mississippi River Alluvium region. The primary objective was to quantify soil health using a comprehensive suite of soil health indicators.

Each participating farmer received an individualized soil health report summarizing their fields' condition. The reports included measurements of soil organic carbon (SOC), carbon stocks, carbon mineralization potential, aggregate stability, bulk density, and plant-available water.

The study consisted of three phases. The first phase involved recruiting farmers and determining whether their fields met the study requirements. Eligible fields were located on the Sharkey, Canalou, Gideon, Lilbourn, and Bosket soil series. The second phase focused on field sampling and data collection. This included collecting soil samples, interviewing farmers to document management histories, shipping soil samples for laboratory analysis, and entering management information online so that soil scientists at SHI headquarters could prepare the final soil health reports. The third and final phase involved delivering the soil health reports to participating farmers, along with a \$200 incentive payment for each farmer.

Jean Noel's primary responsibility was to assist with the second phase of the project. As a member of the field sampling team, Jean Noel contacted farmers to schedule sampling visits and used GIS software to verify that each sampling location corresponded to the appropriate soil series. The team also collected undisturbed soil cores from 0–15 cm and 15–30 cm for bulk density measurements, along with surface soil samples from 0–6 inches for the slake test used to evaluate aggregate stability.

Throughout the internship, the team sampled fields under both irrigated and dryland management systems, representing multiple cash crops, drainage classes, and management practices. The team also identified and sampled baseline, soil health, and reference sites, including state parks and conservation areas, to provide comparisons for agricultural fields. In addition to field sampling, Jean Noel assisted with interviewing farmers to document their management histories, entering field data online, and preparing soil samples for shipment to the laboratory for analysis.

By the end of the project, the team had sampled more than 130 sites, interviewed 26 farmers and four conservation professionals, and shipped 24 large boxes containing approximately 600 pounds (272 kg) of soil samples for laboratory analysis. Field sampling began on May 20, 2026, and was completed on July 21, 2026.

The internship provided Jean Noel with invaluable hands-on experience in large-scale soil health assessment, field sampling techniques, farmer engagement, soil data management, and collaborative research. The experience strengthened both technical and professional skills while providing an opportunity to contribute to an important initiative promoting regenerative cotton production and sustainable soil management.

As an international graduate student at Alabama A&M University, Jean Noel was honored to be part of the project and grateful for the opportunity to contribute to research that supports farmers and the long-term sustainability of U.S. agriculture.



Photos from Stephane Jean Noel

STUDENT HIGHLIGHT: JULIA MAPP WILLIAMS

By Julia Mapp Williams



This summer, Julia Mapp Williams, a junior majoring in Environmental Science with a concentration in Environmental Management, had the opportunity to complete a 10-week internship with the U.S. Department of Energy, Office of Legacy Management, at the Fernald Preserve in Hamilton, Ohio.

As an Environmental Science student with a focus on Environmental Management, Julia brought an academic foundation in environmental systems, management, and stewardship to her internship experience. Her education provided valuable context for understanding the environmental challenges addressed at Fernald Preserve and the importance of long-term environmental management and remediation.



During her internship, Julia contributed to public outreach efforts by creating educational materials to help explain the groundwater remediation processes taking place at the site. This experience let her see how environmental science and management principles are applied beyond the classroom while also strengthening her ability to communicate complex environmental topics to a broader audience.



One highlight of Julia's summer was traveling to Colorado for a four-day training focused on professional development and preparing students for workplace success. The training provided her with valuable skills and perspectives while allowing her to connect with other interns and further develop as a young environmental professional.



Julia's experience with the Department of Energy gave her a meaningful opportunity to apply her Environmental Science education in a professional setting, gain firsthand experience in environmental remediation and public outreach, and build skills that will support her continued academic and professional journey.

STUDENT SPOTLIGHT: ELIJAH MCCRAY

By Elijah McCray



Elijah McCray, a senior Forestry major with a concentration in Forestry Business at Alabama A&M University, spent the summer gaining valuable hands-on experience in natural resource conservation through the USDA Natural Resources Conservation Service (NRCS) 1890 National Scholars Program.

As part of his training as a Soil Conservationist, McCray worked with farmers and landowners in Holmes and Humphreys Counties, Mississippi, providing financial and technical assistance to implement conservation practices. His field experiences exposed him to a variety of agricultural operations, including cropland, grazing land, and forestry, giving him a broader understanding of landowners' diverse conservation needs.

McCray applied knowledge and skills from his natural resource coursework at Alabama A&M directly to his fieldwork. His academic preparation proved particularly valuable during site visits, where he independently assisted landowners with their conservation needs without direct supervision.

As a rising senior, McCray expressed appreciation for the opportunities provided through the 1890 National Scholars Program and the practical experience he gained throughout the summer. The experience has further strengthened his interest in natural resources and conservation as he prepares to complete his degree and begin his professional career.



STUDENT SPOTLIGHT: RAMEL WOODARD

By Ramel Woodard

Ramel Woodard, a senior Environmental Science major with a concentration in Soil Science from Omaha, Nebraska, spent his summer gaining hands-on experience with the USDA Natural Resources Conservation Service (NRCS) as a Soil Conservationist Trainee at the agency's Kent County Field Office.

In this role, Woodard worked directly with farmers and agricultural producers to identify and address resource concerns on their operations. His responsibilities included helping develop conservation plans, creating and interpreting soil maps, and surveying producers' operations to understand better the challenges they faced and identify appropriate conservation practices. Through this work, he gained firsthand experience seeing how soil science and environmental knowledge can support agricultural operations while promoting the responsible management of soil, water, and other natural resources.



Woodard's summer also included extensive training opportunities through NRCS. He learned about the process of certifying organic agricultural operations, explored methods for conducting energy audits, and visited farms to gain a closer look at agricultural production and conservation practices in the field. These experiences gave him a broader understanding of how environmental science and natural resource conservation intersect with modern agriculture.



One of the most memorable experiences of the summer was visiting an organic poultry operation. Woodard had the opportunity to enter a poultry house while wearing a biosecurity suit—a set of protective clothing and equipment used to help prevent the spread of disease and contaminants between people, animals, and agricultural facilities. The experience offered him a firsthand look at the precautions taken to protect animal health and maintain biosecurity within poultry operations.

Woodard's internship with NRCS provided valuable insight into the role of soil science and conservation in supporting farmers and protecting natural resources. The experience let him apply knowledge from his Environmental Science studies in real-world settings while gaining practical skills that will prepare him for a career in soil science, conservation, and natural resource management.

Photos from Ramel Woodard

STUDENT SPOTLIGHT: KEELY GOOCH

By Keely Gooch



Keely Gooch, a sophomore majoring in Animal Bio-Health Sciences and member of the Environmental Science club, spent eight weeks in Aiken, South Carolina, participating in the Savannah River Environmental Sciences Field Station (SRESFS) program.

Throughout the internship, Keely gained hands-on experience in environmental research, fieldwork, and laboratory techniques. She learned how to properly collect and analyze water and soil samples, study macroinvertebrates, and use scientific tools and methods that were previously unfamiliar to her. Her team was also challenged to apply critical-thinking and problem-solving skills to disaster scenarios involving severe droughts, hurricanes, and other natural disasters.



As part of the program, Keely and her team delivered several presentations, including in-person presentations, a poster presentation, and a final oral presentation. She also served as a team lead for her research group, an experience that helped her recognize and develop her leadership abilities.

One of the most valuable lessons Keely took away from the internship was the importance of having a plan B and being prepared to adapt when circumstances change. Throughout her time in Aiken, community resilience, teamwork, and the ability to pivot were recurring themes that strengthened her understanding of what it means to work as a scientist.

Keely also recently learned that she was selected as a USDA 1890 National Scholar. She looks forward to participating in the program throughout her college career and beyond graduation, with plans to pursue a career with the USDA. Her experience with SRESFS provided valuable early research experience that she believes will benefit her as she continues her education and prepares for her future career.

Keely is grateful to God, her family, and herself for the support and perseverance that helped her make the most of this opportunity.

Photos from Keely Gooch

STUDENT SPOTLIGHT: WINSTON SALTER, III

By Winston Salter, III



Winston Salter, III, a senior Civil Engineering major at Alabama A&M University, gained valuable hands-on experience this summer as a Mission Critical Superintendent/Project Manager Intern with Caddell Construction. He supported the construction of a hyperscale data center campus consisting of four two-story buildings totaling nearly one million square feet.



During his internship, Salter completed daily construction reports, reviewed safety permits, supported subcontractors, and assisted the Superintendent and Project Management team with field operations. He also collaborated with multiple trades and project stakeholders in a fast-paced, mission-critical environment.

The experience strengthened Salter's passion for construction and reinforced his goal of pursuing a career in project management and mission-critical construction. He credits the internship with helping him develop valuable skills in communication, planning, teamwork, and leadership.

In addition to his Civil Engineering studies, Salter is an active member of several NRES student organizations, including the Environmental Science Club, Forestry Club, and Wildlife Society. His involvement in these organizations complements his engineering studies by giving him opportunities to explore the relationship between built and natural environments. Through his NRES involvement, Salter has gained broader perspectives on environmental stewardship, natural resource conservation, and sustainability—topics that can play an important role in planning and developing large-scale infrastructure projects. Together, his experiences in Civil Engineering and NRES have given him a well-rounded perspective on how infrastructure and construction can intersect with the environment and the natural resources that surround us.

Salter is grateful to Caddell Construction for the opportunity to gain real-world experience and looks forward to applying the knowledge and skills he gained throughout the remainder of his education and future career.



Photos from Winston Salter, III

RESEARCH

BRINGING REAL-TIME DNA SEQUENCING TO THE CLASSROOM

By Dr. Elica Moss

From May 27–29, 2026, Dr. Elica Moss traveled to Hudson Valley Community College in Troy, New York, to participate in an intensive nanopore sequencing workshop hosted by the Cold Spring Harbor Laboratory DNA Learning Center as part of its Summer of Nanopore Sequencing 2026 initiative.

Nanopore sequencing is an innovative technology that allows individual DNA molecules to be analyzed in real time, making advanced DNA sequencing increasingly accessible for undergraduate teaching and research. During the workshop, participants gained hands-on experience using the Oxford Nanopore Technologies MinION. This portable sequencing device brings real-time DNA sequencing directly into the classroom and laboratory.

Participants were also among the first educators to test a streamlined workflow combining MinION sequencing data with DNA Subway 2.0, the DNA Learning Center's redesigned bioinformatics platform. The new workflow lets users move from DNA sequencing to data analysis using an accessible platform that supports teaching and student research.

A total of 23 educators representing two- and four-year institutions participated in the training. The experience will support integrating nanopore sequencing into courses at Alabama A&M University and provide new opportunities to expand hands-on molecular and bioinformatics experiences through course-based undergraduate research experiences (CUREs).

By introducing students to emerging DNA sequencing technologies and the analysis of real-world biological data, this training provides another avenue to connect classroom learning with the tools and approaches used in modern scientific research.



Photos from Dr. Elica Moss



FROM THE FOREST FLOOR TO THE RESEARCH PRESENTATION: A SUMMER OF FORESTRY, FIRE, AND WILDLIFE AT AAMU

By Dr. William Stone

For seven aspiring natural resource professionals, the summer provided an opportunity to step into the role of a researcher. From June 7 through June 27, 2026, students participated in the Forestry Research Apprenticeship Summer Program at Alabama A&M University, gaining hands-on experience in forestry and natural resource research while exploring potential careers in the field.

Hosted by AAMU's SAF-accredited Forest Ecology & Wildlife Program, the residential program introduced incoming and early-career college students to the research, fieldwork, and management practices that shape today's natural resource professions. The program focuses on recruiting students from underrepresented and underserved communities and creating pathways into careers in forestry, fire management, wildlife, and related disciplines.

Throughout the three-week program, students participated in field-based research activities, worked with forestry faculty and mentors, and gained experience with the tools and techniques used to study and manage forest ecosystems. Each student was assigned an individual research, education, outreach, or management project and worked with a mentor throughout the process. Students also supported their peers by assisting with data collection, providing feedback, assessing research, and rehearsing presentations.



The experience culminated in a research presentation session on June 27 in the ARC Auditorium, where students presented their results. Their projects explored a diverse range of questions related to wildlife, forest health, fire, climate, and natural resource management:

- Alexis None presented Avian Diversity at Two Locations in Northern Alabama, mentored by Kira Williams, Stone, and Wang.
- Zion Stevens examined Assessing Overrun or Underrun Using Different Log Rules on Oak and Cedar Logs, with mentorship from Whigham and Naka.
- Benjamin "Blake" Battle studied Small Mammal Abundance and Diversity in Burned and Unburned Shortleaf Pine at WTARS, mentored by Stone.
- Jaiden Borum explored Low-Tech Methods to Produce Biochar from Woody Biomass, with mentorship from Whigham.
- Alexis Carmichael investigated the Effect of Tree Canopy Cover on Daytime Ambient Temperature, mentored by Chris Burns and Hossain.
- Jariah Scott conducted a Survey of Urban Tree Health on the AAMU Campus, mentored by Bowman.
- Antavion Benison explored Planning and Executing Prescribed Burns, with mentorship from Whigham.

Together, the projects demonstrated the breadth of research opportunities available within forestry and natural resources. Students investigated wildlife populations, forest health, urban trees, prescribed fire, forest measurements, woody biomass, and the relationship between vegetation and environmental conditions.



The program also challenged students to develop skills beyond data collection and fieldwork. Through their final presentations, students practiced communicating scientific information and explaining their research's significance to an audience. The experience provided an early introduction to the research process—from developing a question and collecting information to analyzing results and communicating findings.

Students' accomplishments were recognized during the program's closing awards. Alexis Johnson, David R. Green, and Mekhi Miller were recognized as Summer Program Assistants. Alexis None earned first place in both the Tree Identification and Compass and Pacing contests, while Blake Battle and Jaiden Borum placed second and third, respectively, in the Tree Identification Contest, and Antavion Benison and Blake Battle placed second and third in the Compass and Pacing Contest. The Quiz Bowl team included Alexis None, Antavion Benison, Jariah Scott, and Zion Stevens, while Jaiden Borum and Zion Stevens received Safety Awards. Benjamin "Blake" Battle received the Director's Award. Research presentation medals were awarded to Battle (Gold), Benison (Silver), and Borum (Bronze).

The students also had an opportunity to apply their growing knowledge outside of their research projects. During the June 17 Forestry Fair on the AAMU campus, participants served as guides and hosts at information and engagement booths, introducing youth from Boys & Girls Clubs and other Huntsville-area civic organizations to forestry and natural resource careers.

By combining student-led research with fieldwork, mentorship, professional development, and certification opportunities, the program provides participants with an early foundation for future careers in natural resources. For these seven students, the summer offered a chance to begin developing researcher skills while gaining a broader understanding of how scientific knowledge can inform the management and stewardship of forests, wildlife, and other natural resources.

The Forestry Research Apprenticeship Summer Program was hosted by the SAF-accredited Forestry Ecology & Wildlife Program at Alabama A&M University, in partnership with the U.S. Forest Service (USFS) Office of Civil Rights. The USFS and Alabama Cooperative Extension System (ACES) funded the program. The USFS provided funding, instruction, and certification opportunities, hosted field tours, and conducted field experiments. ACES provided student stipends, room, and board for the three-week residential program, while AAMU provided personnel, instruction, and certification opportunities.



Photos from Dr. William Stone and by David Green

WANT TO KNOW MORE?

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 FOR YOUR STORY TO BE
 SHARED!**

Photo by David Green

